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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/801,828

03/15/2004

Chien-Ting Lai

3134

25859

7590

02/28/2006

WEI TE CHUNG

FOXCONN INTERNATIONAL, INC.

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SANTA CLARA, CA 95050

EXAMINER

DOAN, THERESA T

ART UNIT

PAPER NUMBER

2814

DATE MAILED: 02/28/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/801,828	Applicant(s) LAI ET AL.	
	Examiner Theresa T. Doan	Art Unit 2814	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 03 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 January 2006.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,4-12 and 21-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-12 and 21-27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Request for Continued Examination*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 01/18/06 has been entered. An action on the RCE follows.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1, 2, 4-12 and 21-27 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The limitation of “**transparent** substrate”, as recited in claims 1, 11 and 21, is not supported in the original disclosure.

Claims 2, 4-10, 12 and 22-27 are also rejected because dependent claims, which are depend on claims 1, 11 and 21.

### ***Specification***

4. The amendment filed 01/18/06 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: in paragraph [0017], the added limitation of "a transparent substrate" and in paragraph [0020], the new added portion "in addition, ... a higher aperture ratio" is not supported in the original disclosure.

Applicant is required to cancel the new matter in the reply to this Office Action.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-2, 4-5, 6-12 and 21-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lee (U.S. Pat. 6,452,210) in view of Tanaka (U.S. Pub. 2004/0027503).

Regarding claims 1-2, 4, 7-8, 11-12, 21, 23, 25 and 27, Lee (Fig. 3C) discloses a thin film transistor used in a display device, comprising: a substrate 30; a gate electrode

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32 made of metallic material such as Al, Mo, Cr, Ta and an Al alloy (column 3, lines 31-33), the gate electrode 32 being disposed in the substrate 30; a silicon nitride or silicon oxide of gate insulation layer 34 (column 3, lines 35-37) disposed on the substrate 30 and gate electrode 32; a channel layer 36 disposed on the gate insulation layer 34; a source/drain ohmic contact layer 38 arranged on opposite ends of the channel layer; a source electrode 40 disposed on the substrate 30 and source ohmic contact layer 38; and a drain electrode 40 disposed on the substrate 30 and drain ohmic contact layer 38.

Lee (Fig. 3C) discloses a substrate 24 is made of transparent material but does not disclose the substrate layer 30 is also made of transparent material.

However, Tanaka (Fig. 4) discloses the display device having pixels arranged in the form of a matrix on a transparent substrate 201 typically made of glass (see paragraph [0037] lines 1-5) for receiving the light through the back light at the rear surface side of the substrate to the TFT (see paragraph [0037] lines 16-19).

Accordingly, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to form the substrate layer 30 of Lee having transparent characteristics because such forming transparent substrate would receive the light through the back light at the rear surface side of the substrate to the TFT, as taught by Tanaka (see paragraph [0037] lines 16-19).

Regarding claim 5, Lee (Fig. 3C) discloses that the cross-section of the gate electrode 32 is trapezoidal.

Regarding claims 9-10, Lee (Fig. 3C) discloses the channel layer 36 is made of amorphous silicon and the source/drain ohmic contact layers, which are formed by doping the channel layer (column 3, lines 35-40).

Regarding claims 22, 24 and 26, because the thin film transistor functioning as a switching device (column 1, lines 15-19), the gate electrode 32 would control the thin film transistor to switch on or off.

Regarding claim 6, Lee (Fig. 3C) discloses that the cross-section of the gate electrode 32 is trapezoidal but does not disclose wherein a cross-section of the gate electrode is rectangular.

However, it is noted that the Federal Circuit held that where the only different between the prior art and the claims was a recitation of relative dimensions of the claimed device and a device having the claimed relative dimensions would not perform differently than the prior art device, the claimed device was not patentably distinct from the prior art device. *In Gardner v. TEC Systems, Inc.*, 725 F.2d 1338, 220 USPQ 777 (Fed. Cir. 1984), Cert. Denied, 469 U.S. 830, 225 USPQ 232 (1984). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to modify the device of Lee by forming the rectangular shape of a cross-section of the gate electrode because it appears that these changes in shape would produce no functional differences.

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***Response to Arguments***


Applicant's arguments with respect to claims 1-2, 4-12 and 21-27 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Theresa T. Doan whose telephone number is (571) 272-1704. The examiner can normally be reached on Monday to Friday from 7:00AM - 4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, WAEL FAHMY can be reached on (571) 272-1705. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Theresa Doan  
February 21, 2006.